

A B S T R A C T

A DIRECT INJECTION TWO-STROKE ENGINE

5 A two-stroke engine having a combustion chamber
 (12), a cylinder (6) having an exhaust port (9) on which
 is centered a first diametral plane of the cylinder, a
 piston (4), a cylinder head (10) fitted with a sparkplug
 (11) on the same side as the exhaust port relative to a
10 second diametral plane (P2-P2) perpendicular to the
 first, and an injector (20) adapted to spray a jet of
 fuel into the combustion chamber, which is on the other
 side of the second diametral plane, the jet injection
 axis (P) being at an angle α from 30° to 70° to a
15 transverse plane (T-T) of the cylinder and an angle β
 from $+45^\circ$ to -45° to the first diametral plane. The
 diffuser angle γ of the jet is from 15° to 75° , injection
 of fuel begins when the crankshaft (3) is from 45° to 20°
 ahead of closure of the exhaust port (9), and the
20 injection pressure and the orientation of the jet
 injection axis are determined as a function of the flow
 of the gases to obtain a stoichiometric air/fuel mixture
 in the region of the sparkplug at the moment of ignition.

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35 Translation of the title and the abstract as published by the PCT Authorities,
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 48.3.